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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Bart Gerard Bernard Barenbrug

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NXP, B.V.

NXP INTELLECTUAL PROPERTY DEPARTMENT

M/S41-SJ

1109 MCKAY DRIVE

SAN JOSE, CA 95131

EXAMINER

MEROUAN, ABDERRAHIM

ART UNIT

PAPER NUMBER

2628

NOTIFICATION DATE

DELIVERY MODE

06/11/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No. 10/581,222	Applicant(s) BARENBRUG ET AL.	
	Examiner ABDERRAHIM MEROUAN	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06/01/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments directed to claims 1-14 have been fully considered but they are not persuasive.

2. In response to applicants argument that the applicants have amended the abstract to remove the terms "said" and "means". In view of the amendment to the specification, the objection to the specification has been withdrawn.

3. In response to applicants argument that the prior art, alone or in combination, fails to teach all the limitations of independent claim 1, and fail to disclose or teach "*a rasterizer for transversing a surface grid over a surface of primitives of said 3D images for all N different views of said 3D images,*" Dietrich in view of Wood teaches this limitation. Dietrich teaches: " *a rasterizer for transversing a surface grid over a surface of primitives of said 3D images for all "*, and "*N screen space resamplers each for resampling the shaded color sample determined by said shader unit according to one "*(Dietrich, Page 4. Paragraph [0050], lines 1 and 6) and (Dietrich, Page 4. Paragraph [0049], line 1) and Wood teaches: "*all N different views of said 3D images*" and "*N different views*", (Wood, Column 7, lines 45 to 49). The combination of Dietrich and Wood shows the obviousness of claim 1 to one in ordinary skill at the time of the invention. Therefore the rejection of the claim 1 remains.

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4. In response to the applicants argument that " *A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. v. Union Oil of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). ". The anticipation is changed to obviousness in view of the new ground of rejection.

5. In response to the applicants argument to the amended independent claim 9. Which recites limitations similar to those of the amended independent claim 1. Thus, the amended independent claim 9 is rejected with the same basis as claim1.

6. In response to the applicants argument that the dependent claims 2-8 and 10-14 depends on one of the amended independent claim 1 and 9. Therefore the dependents claims 2-8 and 10-14, remain rejected I view of the new ground of rejection.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 1- 4 and 9 - 12 are rejected under 35 U.S.C.103(a) as being unpatentable over Dietrich, JR et al. (U.S. PGPUB 20030179220A1), hereinafter Dietrich , In view of Wood (U.S. Patent 6567095 B2) hereinafter referred as Wood.

9. As per claim 1 Dietrich teaches:

Computer graphics processor having a renderer for rendering in parallel N, 3D ~~2D~~ images (Dietrich, Page 1. Paragraph [0002], lines 14 to 16) of a 3D model (Dietrich, Page 1. Paragraph [0003], lines 1 to 6), said renderer comprising: a rasterizer for transversing (Dietrich, Page 3. Paragraph [0048], lines 1 to 2) a surface grid over a surface of primitives (Dietrich, Page 3. Paragraph [0047], lines 3 to 5) of said 3D images(Dietrich, Page 1. Paragraph [0002], lines 14 to 16) (Dietrich, Page 1. Paragraph [0003], lines 3 and 4) a shader unit ₁ (Dietrich, Page 4. Paragraph [0049], line 1)for determining a color of the output of the rasteriser ₁ (Dietrich, Page 4. Paragraph [0049], lines 1 and 2) and forwarding a shaded color sample along with its screen coordinates₁ (Dietrich, Page 4. Paragraph [0049], lines 2 and 3), and N screen space resamplers each for resampling the shaded color sample ₁ (Dietrich, Page 4. Paragraph [0050], lines 1 and 6) determined by said shader unit means(Dietrich, Page 4. Paragraph [0049], line 1) according to one of the N different views. (Dietrich, Page 1. Paragraph [0003], lines 3 and 4)

Dietrich doesn't teach:

for all N different views of said 3D images.

Wood teaches:

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for all N different views ,(Wood, Column 7, lines 45 to 49)of said 3D images, (Wood, Column 7, lines 59 to 61)

Dietrich doesn't teach:

according to one of the N different views.

Wood teaches:

according to one of the N different views. ,(Wood, Column 7, lines 45 to 49)

It would have been obvious to one skilled in the art, at the time of the Applicant's invention, to incorporate the teachings of Wood into the process taught by Dietrich, because through such incorporation would provide a stereoscopic image view.

10. Arguments used to reject claim 9 are the same arguments used to reject claim 1.

11. As per claim 2. Dietrich teaches: Computer graphics processor according to claim 1.

Dietrich doesn't teach:

a texture memory for storing texture maps,
wherein said surface grid is derived from a texture map being associated with said primitive and being stored in said texture memory

Wood teaches:

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a texture memory (Wood, Column 6, line 13) for storing texture maps,(Wood, Column 6, lines 14 and 15) wherein said surface grid is derived from a texture map(Wood, Column 6, lines 15 to 18) being associated with said primitive (Wood, Column 6, lines 24 to 26) and being stored in said texture memory (Wood, Column 6, line 13)

It would have been obvious to one skilled in the art, at the time of the Applicant's invention, to incorporate the teachings of Wood into the process taught by Dietrich, because through such incorporation would provide an improved high speed access to the Texel.

12. As per claim 3 Dietrich in view of Wood teaches: Computer graphics processor according to claim 2

Dietrich in view of Wood doesn't teach:

wherein a grid associated to one of the texture maps stored in the texture memory is chosen as surface grid,

if said texture map is addressed independently.

said texture map is based on a 2D texture,

and the texture coordinates at the vertices do not make up a degenerate primitive.

Wood teaches:

wherein a grid associated to one of the texture maps(Wood; Column 6, lines 3 to 4) stored in the texture memory is chosen as surface grid, (Wood; Column 6, lines 7 to 10) if three requirements are fulfilled, said three requirements including:

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said texture map is addressed independently. (Wood; Column 6, lines 33 to 35)

said texture map is based on a 2D texture, (Wood; Column 6, lines 25 to 26)

and the texture coordinates at the vertices do not make up a degenerate

primitive. (Wood; Column 1, lines 38 to 41)

It would have been obvious to one skilled in the art, at the time of the Applicant's invention, to incorporate the teachings of Wood into the process taught by Dietrich, because through such incorporation would provide an improved high speed access to the Texel.

13. As per claim 4 Dietrich in view of Wood teaches: Computer graphics processor according to claim 3

Dietrich in view of Wood doesn't teach:

the texture map with the largest area in texture space is chosen

if more than one texture maps stored in said texture memory fulfill said three requirements a)-c).

Wood teaches:

the texture map with the largest area in texture space is chosen (Wood; Column 6, lines 13 to 15) if more than one texture maps stored in said texture memory (Wood; Column 6, lines 22 to 24) fulfill said three requirements a)-c). (Wood; Column 6, lines 33 to 35 and, lines 25 to 26, Column 1, lines 38 to 41)

It would have been obvious to one skilled in the art, at the time of the Applicant's invention, to incorporate the teachings of Wood into the process taught by

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Dietrich, because through such incorporation would provide a more flexible and efficient texture storage when generating a new image

14. Arguments used to reject claim 10 are the same used to reject claim 2.

15. Arguments used to reject claim 11 are the same used to reject claim 3.

16. Arguments used to reject claim 12 are the same used to reject claim 4.

17. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dietrich, JR et al. (U.S. PG PUB 20030179220A1), hereinafter Dietrich as applied to claim 1 above. In view of Hayhurst (U.S. PG PUB 20010012018 A1) hereinafter referred as Hayhurst.

18. As per claim 5. Dietrich teaches: Computer graphics processor according to claim 1

Dietrich doesn't teach:

A mean for addressing a display screen,
said renderer having an input for the 3D model and an input for at least one viewpoint for rendering image information for supplying to the addressing means wherein the renderer further comprises an initial part having an input for the 3-D model and for at least one main view point for rendering objects in the form of at least one main view point Z-stack having stack layers with color information and Z-values

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the renderer further comprising

a Z-stack constructor in which, from the at least one main view point Z-stack - generated by the initial stage, Z-stacks for additional viewpoints are constructed, and a further image information occlusion semantics stage for generating image information from the z-stacks

Hayhurst teaches:

A mean for addressing a display screen, (Hayhurst, Figure 1, Block 105)

said renderer having(Hayhurst Page 3 ,Paragraph [0026] , lines 15 to 16) an input for a 3D model (Hayhurst Figure 1, Block 106 and paragraph [0025] , line 12) and an input for at least one viewpoint for rendering image information for supplying to the addressing means(Hayhurst , Page 3, paragraph [0026] , lines 1 to 2, and lines 15 to 24)

wherein the renderer (Hayhurst , Page 3 ,Paragraph [0026] , lines 15 to 16) further comprises an initial part having an input for the 3-D model and for at least one main view point for rendering objects(Hayhurst Figure 1, Block 106 and paragraph [0025] , line 12) in the form of at least one main view point Z-stack having stack layers with color information and Z-values (Hayhurst, Page 1, Paragrph [0009], lines 5 to 7 and Page 2 ,Paragraph [0010] , lines 8 to 14) the renderer further comprising(Hayhurst , Page 3 ,Paragraph [0026] , lines 15 to 16)

a Z-stack constructor in which, from the at least one main view point Z-stack (Hayhurst Page 2 ,Paragraph [0011] , lines 2 to 12)

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generated by the initial stage, Z-stacks for additional viewpoints are constructed, and a further image information occlusion semantics stage for generating image information from the z-stacks (Hayhurst Page 2 ,Paragraph [0012] , lines 2 to 11)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to use the Z-stack constructor as taught by Hayhurst into the process of the Dietrich to add Z-stack constructor for generating image information from Z-stacks.

19. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dietrich, JR et al. (U.S. PGPUB 20030179220A1), hereinafter Dietrich as applied to claim 1 above In view of Wood (U.S. Patent 6567095 B2) hereinafter referred as Wood as applied to claim 2 and further in view of In view of Hayhurst (U.S. PGPUB 20010012018 A1) hereinafter referred as Hayhurst

20. As per claim 5. Dietrich in view of Wood teaches: Computer graphics processor according to claim 2

Dietrich doesn't teach:

A mean for addressing a display screen,
said renderer having an input for the 3D model and an input for at least one viewpoint for rendering image information for supplying to the addressing means wherein the renderer further comprises an initial part having an input for the 3-D model and for at least one main view point for rendering objects in the form of at

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least one main view point Z-stack having stack layers with color information and Z-values

the renderer further comprising

a Z-stack constructor in which, from the at least one main view point Z-stack - generated by the initial stage, Z-stacks for additional viewpoints are constructed, and a further image information occlusion semantics stage for generating image information from the z-stacks

Hayhurst teaches:

A mean for addressing a display screen, (Hayhurst, Figure 1, Block 105)

said renderer having(Hayhurst Page 3 ,Paragraph [0026] , lines 15 to 16) an input for a 3D model (Hayhurst Figure 1, Block 106 and paragraph [0025] , line 12) and an input for at least one viewpoint for rendering image information for supplying to the addressing means(Hayhurst , Page 3, paragraph [0026] , lines 1 to 2, and lines 15 to 24)

wherein the renderer (Hayhurst , Page 3 ,Paragraph [0026] , lines 15 to 16) further comprises an initial part having an input for the 3-D model and for at least one main view point for rendering objects(Hayhurst Figure 1, Block 106 and paragraph [0025] , line 12) in the form of at least one main view point Z-stack having stack layers with color information and Z-values (Hayhurst, Page 1, Paragraph [0009], lines 5 to 7 and Page 2 ,Paragraph [0010] , lines 8 to 14) the renderer further comprising(Hayhurst , Page 3 ,Paragraph [0026] , lines 15 to 16)

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a Z-stack constructor in which, from the at least one main view point Z-stack

(Hayhurst Page 2 ,Paragraph [0011] , lines 2 to 12)

generated by the initial stage, Z-stacks for additional viewpoints are constructed,
and a further image information occlusion semantics stage for generating image

information from the z-stacks (Hayhurst Page 2 ,Paragraph [0012] , lines 2 to

11)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to use the Z-stack constructor as taught by Hayhurst into the process of the Dietrich in view of Wood to add Z-stack constructor for generating image information from Z-stacks.

21. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dietrich, JR et al. (U.S. PGPUB 20030179220A1), hereinafter Dietrich as applied in claim 1 . In view of Hayhurst (U.S. PGPUB 20010012018 A1) hereinafter referred as Hayhurst as applied in claim 5 above, and further in view of Hanna et al. (U.S. Patent 006269175 B1) hereinafter referred as Hanna.

22. As per claim 6. Dietrich In view of Hayhurst teaches: Computer graphics processor according to claim 5

Dietrich In view of Hayhurst doesn't teach:

an object extractor for extraction of objects from a view point z- stack.

Hanna teaches:

an object extractor for extraction of objects from a view point z- stack.

(Hanna , Column 11, lines 25 to 27)

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Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention that adding an object extractor to the computer graphics processor as taught by Hanna into the process of the Dietrich in view of Hayhurst to provide an efficient view of 3D scenes on 3D display system.

23. As per claim 7. Dietrich In view of Hayhurst : Computer graphics processor according to claim 6

Dietrich In view of Hayhurst teach doesn't teach:

wherein the object extractor is arranged for extracting objects from the at least one main view point ~~view~~ z-stack.

Hanna teaches:

wherein the object extractor is arranged for extracting objects from the at least one main view point ~~view~~ z-stack. (Hanna , Column 11, lines 25 to 27)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention the use of the object extractor as taught by Hanna into the process of the Dietrich in view of Hayhurst to describe the functionality of the object extractor from at least one main point view z-stack.

24. Claim 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dietrich, JR et al. (U.S. PGPUB 20030179220A1), hereinafter Dietrich as applied in claim 1, In view of Wood (U.S. Patent 6567095 B2) hereinafter referred as Wood as applied to claim 2 above and In view of Hayhurst (U.S. PGPUB 20010012018 A1) hereinafter referred as Hayhurst as applied in claim 5 above, and further in view of Hanna et al. (U.S. Patent 006269175 B1) hereinafter referred as Hanna.

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25. As per claim 6. Dietrich In view of Hayhurst and in view of Wood teaches: Computer graphics processor according to claim 1 ,2 and 5

Dietrich In view of Wood and in view of Hayhurst doesn't teach:

an object extractor for extraction of objects from a view point z- stack.

Hanna teaches:

an object extractor for extraction of objects from a view point z- stack. (Hanna , Column 11, lines 25 to 27)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention that adding an object extractor to the computer graphics processor as taught by Hanna into the process of the Dietrich In view of Wood and in view of Hayhurst and in view to provide an efficient view of 3D scenes on 3D display system.

26. As per claim 7. Dietrich In view of Wood and in view of Hayhurst: Computer graphics processor according to claim 6

Dietrich in view of Hayhurst ,and in view of Wood : teach doesn't teach:

wherein the object extractor is arranged for extracting objects from the at least one main view point ~~view~~ z-stack.

Hanna teaches:

wherein the object extractor is arranged for extracting objects from the at least one main view point ~~view~~ z-stack. (Hanna , Column 11, lines 25 to 27)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention the use of the object extractor as taught by Hanna into

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the process of the Dietrich In view of Wood and in view of Hayhurst and in v to describe the functionality of the object extractor from at least one main view point z-stack.

27. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dietrich, JR et al. (U.S. PGPUB 20030179220A1), hereinafter Dietrich as applied in claim 1. In view of Hayhurst (U.S. PGPUB 20010012018 A1) hereinafter referred as Hayhurst as applied in claim 5 above, and further in view of Hanna et al. (U.S. PGPUB 20010036307 A1) hereinafter referred as Hanna.

28. As per claim 8. Dietrich In view of Hayhurst teaches: Computer graphics processor according to claim 5

Dietrich In view of Hayhurst doesn't teach:

wherein the DOF rendering stage is arranged for DOF processing of the at least one main view point ~~view~~ z-stack into at least one main view point z-stack comprising DOF blurring.

Hanna teaches:

wherein the DOF rendering stage is arranged for DOF processing .(Hanna, Page 1, Paragraph [0013], lines 3 to 5)of the at least one main view point ~~view~~ z-stack into a at least one main view point z-stack .(Hanna, Page 1, Paragraph [0038], lines 3 and 5)comprising DOF blurring.(Hanna, Page 1, Paragraph [0013], lines 5 and 6)

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Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention the use of the DOF rendering stage as taught by Hanna into the process of the Dietrich in view of Hayhurst for a high image resolution.

29. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dietrich, JR et al. (U.S. PGPUB 20030179220A1), hereinafter Dietrich as applied in claim 1. In view of Wood (U.S. Patent 6567095 B2) hereinafter referred as Wood as applied to claim 2 above and in view of Hayhurst (U.S. PGPUB 20010012018 A1) hereinafter referred as Hayhurst as applied in claim 5 above, and further in view of Hanna et al. (U.S. PGPUB 20010036307 A1) hereinafter referred as Hanna.

30. As per claim 8. Dietrich in view of Wood and in view of Hayhurst teaches: Computer graphics processor according to claim 5

Dietrich In view of Hayhurst doesn't teach:

wherein the DOF rendering stage is arranged for DOF processing of the at least one main view point ~~view~~ z-stack into a at least one main view point z-stack comprising DOF blurring.

Hanna teaches:

wherein the DOF rendering stage is arranged for DOF processing .(Hanna, Page 1, Paragraph [0013], lines 3 to 5) of the at least one main view point ~~view~~ z-stack into a at least one main view point z-stack .(Hanna, Page 1, Paragraph [0038],

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lines 3 and 5) comprising DOF blurring. (Hanna, Page 1, Paragraph [0013], lines 5 and 6)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention the use of the DOF rendering stage as taught by Hanna into the process of the Dietrich in view of Wood and in view of Hayhurst for a high image resolution.

31. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dietrich, JR et al. (U.S. PG PUB 20030179220A1), hereinafter Dietrich, In view of Wood (U.S. Patent 6567095 B2) hereinafter referred as Wood, as applied to claim 11 above and further in view of Hayhurst (U.S. PG PUB 20010012018 A1) hereinafter referred as Hayhurst.

32. As per claim 13: Dietrich, in view of Wood teaches: Method of rendering N views of 3D images according to claim 11:

Dietrich, in view of Wood doesn't teach:

further comprising the steps of:

Supplying data and addressing means of a 3D display wherein for a main view point objects in the form of at least one main view point Z-stack comprising stack layers are rendered with RGB and Z-values constructing ~~construction~~ from the at least one main view point Z-stack, z-stacks for additional viewpoints and generating from the Z-stacks for additional viewpoints by means of Z-tracing data to be supplied to the addressing means

Hayhurst teaches:

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Supplying data and addressing means of a 3D display device (Hayhurst Figure 1; Page 3, paragraph [0026] , line 1, lines 23 to 25)

wherein for a main view point objects in the form of at least one main view point Z-stack comprising stack layers are rendered with RGB and Z-values (Hayhurst Page 2 ,Paragraph [0010] , lines 8 to 14)

constructing ~~construction~~ from the at least one main view point Z-stack , z-stacks for additional viewpoints, (Hayhurst Page 2 ,Paragraph [0011] , lines 2 to 7) and generating from the Z-stacks for additional viewpoints by means of Z-tracing data to be supplied to the addressing means , (Hayhurst Page 2 ,Paragraph [0012] , lines 2 to 11)

It would have been obvious to one skilled in the art, at the time of the Applicant's invention, to incorporate the teachings of Hayhurst into the process taught by Dietrich, in view of Wood, because through such incorporation would provide an improved high speed access for accessing data

33. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dietrich, JR et al. (U.S. PGPUB 20030179220A1), hereinafter Dietrich as applied to claim 9 above. In view of Burrell. (U.S. PGPUB 20030145008 A1) hereinafter referred as Burrell.

34.As per claim 14 Dietrich doesn't teach: Computer graphics processor according to claim 9

Dietrich doesn't teach:

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Computer program product comprising program code means stored on a computer readable medium for performing a method according to claim 9, when said program is run on a computer.

Burrell teaches:

Computer program product comprising program code means stored on a computer readable medium for performing a method according to claim 9, when said program is run on a computer. (Burrell Page 4, Paragraph [0034], lines 7 to 9)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention, to run a program code stored in a computer as taught by Burrell into the process of the Dietrich, to perform the method of displaying 3D scenes on 3D display system.

Conclusion

35. Applicants amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory

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period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABDERRAHIM MEROUAN whose telephone number is (571)270-5254. The examiner can normally be reached on Monday to Friday 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached on (571) 272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Abderrahim Merouan

Patent Examiner

AU: 2628

/XIAO M. WU/

Supervisory Patent Examiner, Art Unit 2628